

METHOD OF MEASURING AND EVALUATING CONSUMER RESPONSE FOR THE DEVELOPMENT OF CONSUMER PRODUCTS

BACKGROUND OF THE INVENTION

This invention relates to methods for performing marketing research which involve measuring and evaluating the responses of consumers or of the relevant audience to consumer products or other items which are to be marketed or presented to the audience, the members of which are in a position to choose between the items. The object of such methods is to determine how members of the audience will react to the introduction of new products to the market or to changes in the characteristics or image of an existing product. Marketing strategies can then be based upon the data obtained therefrom.

Such methods have applications in the field of marketing and advertising, where individual consumers are interviewed to obtain their responses to various consumer goods and services which are identified as having or being associated with certain traits and characteristics, i.e., attributes. Consumers heretofore have been presented with various existing goods and services, particularly proposed or new products being experimentally marketed, and interviewed to determine the extent to which they attribute these attributes to the products. This and other information about the consumers themselves, such as product usage patterns, demographic and personal data, history of trying new products, likelihood of purchasing proposed new products, and their evaluation of what and to what extent attributes would ideally be possessed by a product, have been evaluated in order to develop new and existing products having attributes which are desirable to consumers.

Such methods have also been used to measure and evaluate voter response to candidates for political office and political parties, platforms, ideas and policies, all of which for the purposes of these methods, can be considered products associated with various attributes and presented to a relevant audience for evaluation.

The information obtained from consumers can be stored in and evaluated by a computer. Such computers have been used to create models which simulate markets and market segments so that proposed new products or changes to existing products can be evaluated without engaging in the costly process of actual pre-market testing to determine desirability or potential market share for each new product on each proposed change to a given product.

Several such marketing methods have been used commercially and have been described in marketing and business management journals. A variety of interviewing methods have been used to elicit information from consumers, including mall or shopping center interviews, telephone surveys and personal scheduled interviews in the home of the consumer, the place of business of the market researcher or other convenient location. These interviews have been open-ended, in that they invite any response the consumer might feel is appropriate or, alternatively, structured, in that the consumer is asked to choose among given responses. The interviews have also been qualitative, in that consumers are requested to identify appropriate attributes with respect to related items, or quantitative, where consumers are asked to evaluate the extent or degree to

which such attributes describe the items or are otherwise attributable to the items.

Various combinations of open-ended, structured, qualitative and quantitative interviews have been used to elicit useful information from consumers for carrying out the market research or in creating a model for market simulation. Statistical analyses have been applied in various ways to this information in order to provide useful data concerning the marketing of the items.

The effectiveness of any market research method or simulation depends upon how closely that method approximates the actual market or market segment. Essential to the effectiveness and accuracy of any market research method is how the set of attributes, which are used in the quantitative interviews to measure and evaluate consumer response to items, is chosen. Some methods simply utilize the talent or expertise of the market researchers to choose what is believed to be an appropriate set of attributes. Descriptors of items have also been elicited directly from consumers from which attributes are chosen by eliminating the less appropriate descriptors through further interviews or various statistical analyses. For example, it is known that consumers do not make choices based upon a large number of attributes which may be obtained from consumer interviews or compiled by market researchers. Thus, known statistical methods such as factor analysis and cluster analysis have been used to group descriptors or attributes into factors which are intended to approximate the underlying constructs of consumer behavior. Attributes have then been chosen from each cluster or factor using a centroid or averaging method. Moreover, when such information has been obtained for the purpose of creating a model for market simulation, these methods are necessary simply to reduce the number of attributes and, therefore, variables to a workable level.

Other statistical methods such as discriminant analyses have been used to measure the degree to which certain descriptors can be used by consumers as attributes to discriminate between items. It is desirable, of course, to utilize data related to attributes which provide the greatest discrimination between all items so that the data obtained can effectively be used in the model or by the market researcher to accurately identify and predict consumer choices between items on the basis of new or changed attributes. These new or changed attributes are a key to developing new as well as existing products.

The appropriateness of a set of chosen attributes has been measured using known measures of behavioral variance generally applied in the behavioral sciences. The degree of behavioral variance displayed by a set of attributes is, among other things, an indication of the efficacy of the set, chosen by the market researcher, to provide the sample of consumers interviewed, which sample statistically represents the actual market or market segment, with the capability to explain their product choice. Prior to this invention, existing research methods have failed to construct the set of descriptors, including non-rational descriptors, necessary to perform a complete analysis. In general, mainly rational descriptors have been used. In some instances, a small number of non-rational descriptors have been selected, but never in structured sets that have been measured for analytical completeness when used in concert with rational descriptors. This unstructured approach was